Elingamita (Myrsinaceae) a New Monotypic Genus from West Island, Three Kings.

By G. T. S. BAYLIS, University of Otago.

In January, 1950, Major M. E. Johnson succeeded after several unsuccessful attempts in landing on West Island at a point from which it was possible for him to climb the cliffs to the vegetation on the upper slopes. There he made a comprehensive plant collection, which he handed to me. It established that this small island though steep and windswept has a considerable flora and is of much ecological interest. In January, 1951, thanks to the skilled boat work of Mr. E. Beaver, of Whangaroa, I accompanied Major Johnson on a second visit. A subsequent paper will give an account of the vegetation of West Island together with that of the other outliers of the Three Kings Group. The present purpose is to describe a new tree first collected in fruit by Johnson and found to be both flowering and fruiting in the following January. Meanwhile, fruits had been submitted to the Herbarium, Royal Botanic Gardens, Kew, whence Dr. Melville reported that they appeared to be referable to the *Myrsinaceae*. The floral structure has confirmed that the tree belongs to this family but the monograph by Mez (1902), which remains the standard treatment, requires the erection of a new genus for its reception. The flowers have now been examined at Kew also, and I am indebted to the Director, Sir Edward Salisbury, for a report that "they do not seem to fit any genus of *Myrsinaceae* hitherto described."

ELINGAMITA n. gen.

Flores hermaphroditi, 4-6 meri. Sepala valvata, punctata, libera. Corolla brevior sepalis, tubulosa, truncata vel margine obscure lobulato. Filamenta corolla fere omnino libera et eadem in maturitate bene excedenta. Anthera elliptica dorso affixa, tota longitudine dehiscenta. Ovarium ovoideum in stylum crassiusculum attenuatum, stigmate punctiformi. Ovula perpauca in parte superiore placentae uniseriatim immersa. Fructus drupaceus, globosus, apice stylo persistento mucronatus, endocarpio crustaceo, monospermus. Albumen sphaeroideum, corneum, album, pulvino lato e placenta formato sedens. Embryo cylindraceus, obliquus vel transversus, paululo cervatus.

Arbor foliis alternis, exstipulatis, simplicibus, punctis. Inflorescentiae terminales, paniculatae, primo obtectae bracteis latis caducis.

A ceteris generis distat corolla deminuta sepalis breviore, omnino vel fere omnino tubulosa. Typus *E. johnsoni n. sp.*

Flowers hermaphrodite, 4-6 partite. Sepals valvate, punctate free. Corolla shorter than the sepals, tubular, truncate or with an obscurely lobed mouth. Filaments almost wholly free from the corolla and in mature flowers much exceeding it. Anthers elliptical, dorsifixed, splitting down their whole length. Ovary ovoid narrowed into a rather stout

style with a stigmatic pit at the apex. Ovules very few immersed at one level in the upper half of the placenta. Fruit a drupe, globose, crowned by a peristent style, one-seeded with a brittle endocarp. Endosperm rounded, horny, white, seated on a broad cushion of placental tissue. Embryo cylindrical, oblique or transverse, almost straight.

A tree with alternate, exstipulate, simple, gland-dotted leaves. Flowers in terminal panicles concealed in bud by broad deciduous bracts.

Differs from all other genera in possessing a reduced corolla shorter than the calyx and wholly or almost wholly tubular. Type *E. johnsoni* n. sp.

Elingamita johnsoni n. sp. Pl. 10, figs. 1, 2. Text figs. 1-6.

Arbor glaber cortico leve, foliis coriaceis, integris, utrimque manifeste pinnate venosis, obovatis, in petiolos brevissimos gradatim contractos, c.100-180 mm. longis, c.45-90 mm. latis. Paniculae florales lutescentae, c. 50 mm. longae ex aequo latae, fructiferae c.100 mm. Flores pedicellis c.5 mm. longis, corollis c.2.5 mm. latis. Ovula 2-4. Fructus ruber, c.17 mm.

West Island, Three Kings, New Zealand.

A glabrous tree with smooth bark. Leaves leathery, entire, on both surfaces strongly pinnate-veined, obovate, about 4-7 inches long and $1\frac{3}{4}$-$3\frac{1}{2}$ inches wide, narrowed gradually into very short petioles. Panicles in flower yellowish about 2 inches in length and breadth, in fruit 4 inches. Flowers on stalks about $\frac{1}{4}$ inch long, corolla about 1-10th inch diameter. Ovules 2-4. Fruit red about 2-3rd inch diameter.

The very reduced tubular corolla lacking well defined free lobes and shorter than the calyx appears to be unique in the *Myrsinaceae*. The placenta has the uniseriate ovules of the tribe *Myrsineae* but the terminal paniculate inflorescence, non capitate stigma and well developed filaments separate *Elingamita* substantially from *Myrsine*, *Suttonia* and *Rapanea*, the genera to which the other members of the family indigenous in New Zealand have been, at one time or another, referred (Hosaka 1940, Allan 1947, Oliver 1951). Closer allies are presumably to be sought in the Pacific Islands and Malaya, but both the genera of this region with the same form of inflorescence, placenta and stigma (*Labisia* and *Tetrardisia*) are peculiar monotypes. Geographically, the nearest genus with a paniculate inflorescence is *Tapeinosperma*, which is well developed in New Caledonia and which has moreover a punctiform stigma. However, these resemblances are offset by a pacenta less like that of *Elingamita* than is that of *Myrsine*. Unfortunately, the vegetative anatomy of the family does not appear to be sufficiently well known for it to be employed as guide to the relationships of the new genus.

Elingamita johnsoni is represented by perhaps a dozen trees on West Island, but they are members of a windswept forest scrub in which the true habit cannot be seen. Like the other Three Kings monotypic genus *Plectomirtha* Oliver it has the general aspect of a karaka (*Corynocarpus laevigata*). The cream-coloured inflorescences are not very conspicuous, but the ripe fruit is brilliant red and produced in large bunches. The tree thus appears well worthy of cultivation, and it

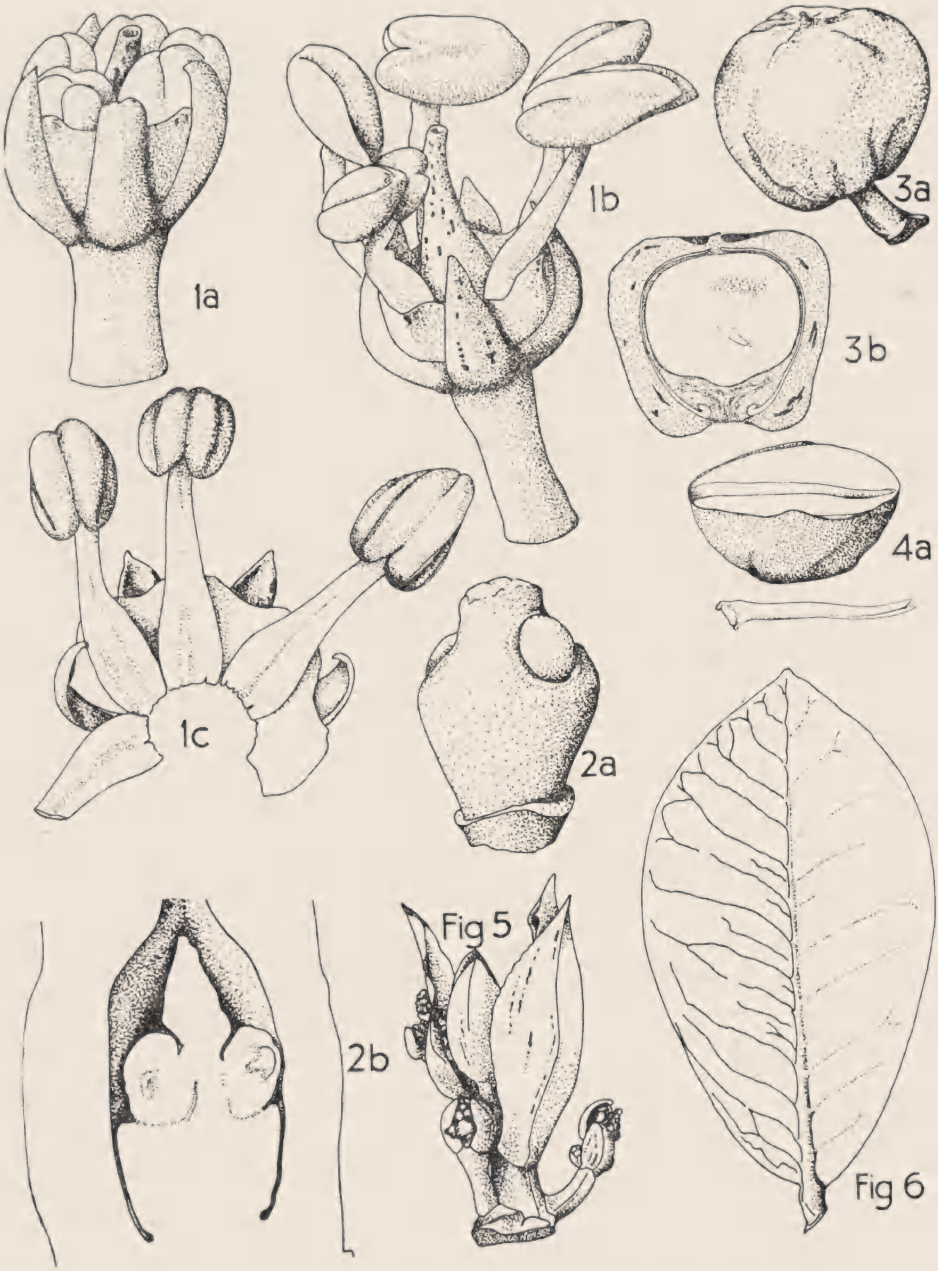


Fig. 1. Flower x 10.—a, bud; b, mature; c, portion of calyx, corolla and androecium.

Fig. 2. Placenta x 44.—a, entire; b, in L.S. of ovary.

Fig. 3. Fruit x 1.5.—a, entire; b, L.S. (persistent calyx not shown).

Fig. 4. Embryo x 2.—a, in situ in the endosperm; b, dissected out.

Fig. 5. Young inflorescence showing caducous bracts x 1.75.

Fig. 6. Underside of leaf x 0.5.

is a pleasure to dedicate the species to its discoverer, Major Johnson, on whose enterprise, skill and persistence the exploration of the smaller islands of the Group has greatly depended. The generic name commemorates the tragic wreck in 1902 of the inter-colonial passenger steamer *Elingamite* beneath the cliffs on which the tree grows.

I have to thank the late Major G. A. Buddle for the negative of Plate 10 and Dr. M. Holdsworth for all the drawings in this paper.

REFERENCES.

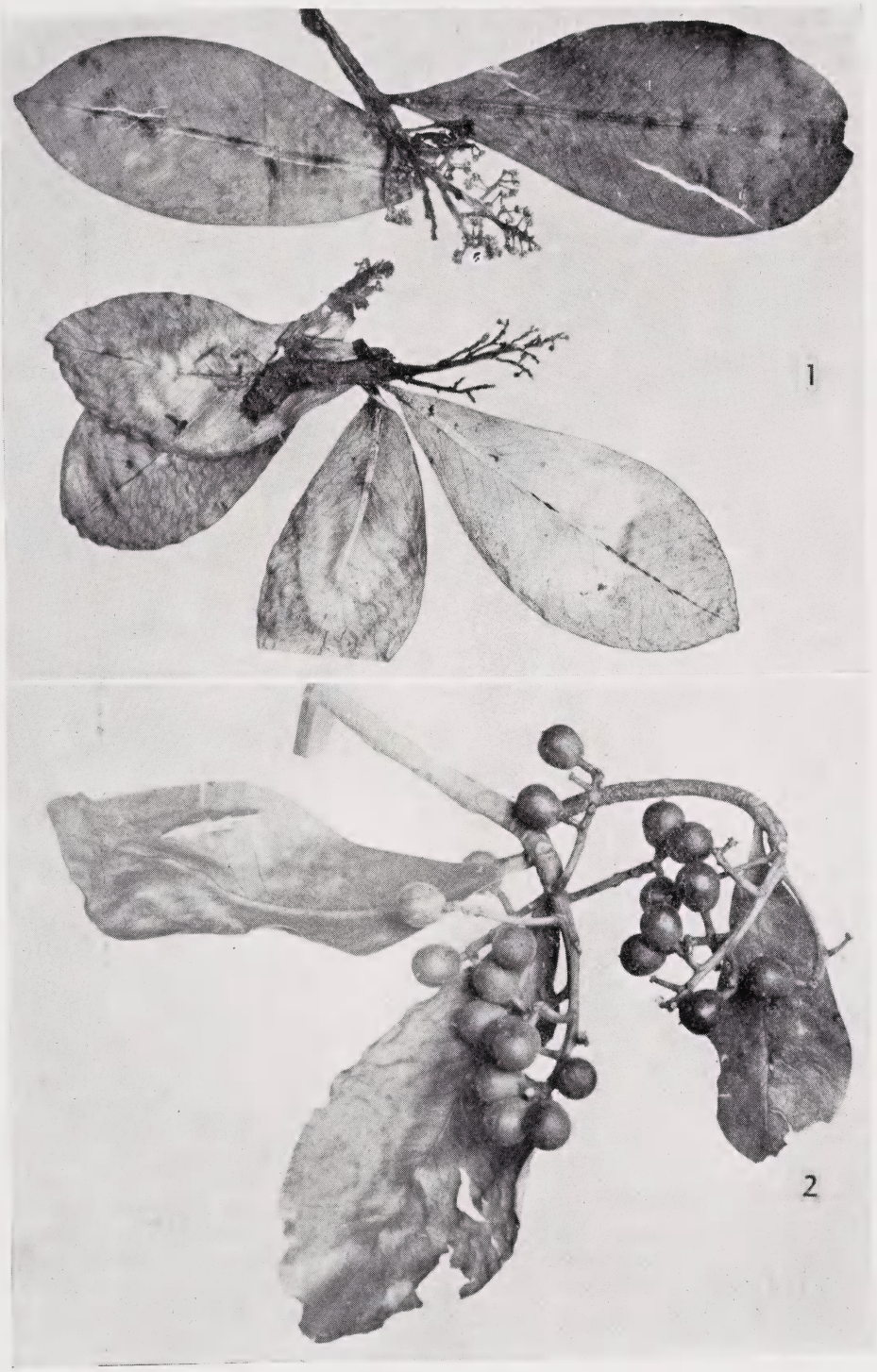
ALLAN, H. H., 1947. Notes on N.Z. floristic botany—No. 8, *Trans. Roy. Soc. N.Z.*, 76, 596.

GUILLAUMIN, A., 1948. Flore de la Nouvelle-Calédonie—Phanérogames.

HOSAKA, E. Y., 1940. A revision of the Hawaiian species of *Myrsine (Suttonia, Rapanea)*, (Myrsinaceae), *B.P. Bishop Mus. Occ. Pap.* 16, 25-76.

MEZ, C., 1902. Myrsinaceae, *Das Pflanzenreich*, 9, IV, 236

OLIVER, W. R. B., 1951. The Flora of the Three Kings Islands: Additional Notes: with note on *Suttonia*. This issue.



Herbarium material: 1, in flower; 2, in immature fruit.
Elingamita johnsoni n. sp.